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CM-SB

The Crown® CM-SB is a stereo bar or stereo mic mount. This handy device mounts two CM-700 mics on top of a single mic stand for coincident and near-coincident stereo miking. The bar has two studs that slide and tighten in place. Other mics with 3/4" (1.905 cm) diameter handles can be used as well.

Positioning the Microphones

1. Thread the bar onto a 5/8"-27 mic stand.
2. Get two mic swivel mounts (such as the Crown ASA-4) or two CM-SM isolation shock mounts. Thread the mounts onto the studs. One stud is longer than the other so that the two mics won't interfere with each other.
3. Using the supplied stereo miking template, adjust the angle and spacing between the mics for the desired stereo effect. To do this, slide the studs in the bar, rotate the mic mounts, and slide the mics fore-and-aft in the mic mounts. Be sure the studs are placed symmetrically on either side of center. Numbered position marks are on the bar to help you do this.
4. Lock the studs in position by threading them tightly into the mic mount or into the supplied 5/8"-27 nut.

Here are some stereo mic techniques that can be used with the stereo bar:

Coincident pair (XY): This technique is mono-compatible. Angle the mics inward so their grilles are aligned vertically, and angle them 90 degrees to 135 degrees apart. An angle of 90 degrees gives a narrow stereo spread unless the musical ensemble surrounds the mics in a semicircle. An angle of 135 degrees gives a wider stereo spread, but may have some off-axis coloration.

Near-coincident pair: Angle the mics outward and space their grilles a few inches apart horizontally. In the O.R.T.F. stereo mic technique, the mics are angled 110 degrees apart (55 degrees either side of center) and are spaced 7 inches (17 cm) apart. This technique tends to provide accurate localization and sharp imaging. Another technique is the N.O.S. method: angle the mics 90 degrees



Stereo bar shown with two CM-700 microphones and two CM-SM shock mounts (mics and shock mounts not included)

apart and space the grilles 1 foot apart. This method has less off-axis coloration than the O.R.T.F. method but less-sharp imaging. A 90°/8" setup works as well.

Angle the mics down slightly so they will aim at the musical ensemble when raised. Raise the mic pair on a boom stand (typically about 14 feet high for an orchestra). Place the mic stand about 5 to 20 feet from the front row of musicians. Find a miking distance where you monitor the desired amount of hall ambience. Close miking sounds close; distant miking sounds distant. A suggested equalization is +3 dB at 80 Hz, -2 dB at 5 kHz and +2 dB at 12 kHz. This EQ compensates for distant miking and off-axis placement.

Architects' and Engineers' Specifications

The product shall be the Crown CM-SB or equivalent. It shall be a stereo bar for mounting two matched microphones on a single microphone stand for coincident and near-coincident stereo miking. The bar shall have two studs that can be slid and tightened in place. These studs shall thread into a standard 5/8"-27 microphone swivel mount or shock mount. The studs shall be held captive by nylon washers. Positioning marks shall be provided on the bar. The Crown CM-SB is specified.

Specifications

Materials: Aluminum bar and studs, nylon washers.

Dimensions: 7 1/8 in. x 1 1/2 in. x 1/8 in. (18 cm x 3.8 cm x 0.3 cm).

Weight: 3.2 ounces (90.7 grams).

Included accessories: Template for stereo mic positioning.

Optional Crown Products and Accessories:

CM-700MP matched pair cardioid condenser mics

CM-SM isolation shock mounts

ASA-4 swivel mounts

PH-1A phantom power supply



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